INTEGRATION of the
MUNITIONS AGILE COMBAT SUPPORT MODEL (MACSM)
into LOGCAT and the
JFACC LOGISTICS PLANNING (JLP) TOOLS

Synopsis Report

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Submitted to:

DTIC-OMI (Input Support Branch)
Defense Technical Information Center
8725 John J. Kingman Road, Suite 0944
Ft. Belvoir, VA 22060-6218

Submitted by:

Synergy, Inc
1763 Columbia Road, NW
Washington, DC 20009-2834
202-232-6261

20000417 049

SYNERGY

TITLE: Integration of the Munitions Agile Combat Support Model (MACSM) into LOGCAT and the JFACC Logistics Planning (JLP) Tools

PROGRAM MANAGER: Patrick M. Thayer

BACKGROUND: Munitions support constitutes the most challenging of logistics problems in supporting expeditionary CONOPS. Munitions are heavy and hazardous; they require specialized handling and test equipment as well as properly trained and certified personnel to ensure safe and effective transportation, build-up, storage, and delivery. There is a need for a user-friendly tool to be used by Air Staff and MAJCOM Munitions Action Officers to calculate rough order of magnitude (ROM) munitions support requirements and timing (e.g. personnel, equipment, transportation, etc.) for rapid reaction/AEF operations. Determining the right mix of these elements that will deliver adequate support without overburdening airlift and other critical logistics elements is not a trivial exercise.

OBJECTIVES: HQ USAF/ILMW requires the development of a PC-based model, complementing JLP-M and B-CAT functionality, to aid munitions AOs in assessing the critical munitions variables, performing what-if analyses and reporting ROM munitions support requirements. The MACSM will complement, but **not duplicate,** munitions assessment modules of JLP-M and B-CAT. At the front end, interfacing with these systems will provide sorties, timing, and munitions requirements to enhance MACSM. Manual input of these data would also be possible. Results of MACSM analyses (output) could be provided to B-CAT in order to improve granularity of requirements for personnel, equipment, and lead time for munitions storage and buildup data. Results of MACSM analyses would constitute the munitions part of the overall logistics ROM planning in support of bare-base and AEF operations. MACSM will be used by Air Staff munitions AOs to improve day-to-day assessment of munitions support requirements for bare-base and AEF planning. It would also be part of the suite of tools to be used in the CSC during actual contingency support operations.

WORK TO BE PERFORMED:

MACSM Requirements Definition: The contractor shall meet with HQ USAF/ILMW personnel to validate, refine and expand requirements previously implemented in an existing Excel-based RAND model.

MACSM Application Design and Development: The contractor shall design the new MACSM application using object oriented or other modern development techniques to facilitate easy interface with JLP-M and B-CAT models. The MACSM application will be developed within 14 months of contract award.

MACSM Implementation and Training: The contractor shall implement the MACSM application at the HQ USAF/ILMW location on a personal computer designated by ILMW. End-user training will be provided to familiarize the user with the utilities, report generation, and analytical capabilities of the new application.

MACSM Documentation: The contractor will be responsible for developing documentation suitable for the end-user community to utilize in their daily operation of the application. Separate documentation will be developed to facilitate one-on-one training.